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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,010	11/22/2000	Andreas Voigt	051480-5017	1235

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MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

DOUGHERTY, THOMAS M

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,010

Applicant(s)

VOIGT ET AL.

Examiner

Thomas M. Dougherty

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 10 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no proper antecedent basis for recitation of "the marginal areas" in these claims. Additionally, the very nature of a hole is a lack, therefore it cannot possibly be compressed. These claims are so indefinite that prior art cannot be applied against them at this time. When they are made definite a consideration of their relationship to the prior art may be made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-5, 7, 13, 14 and 16 are rejected under 35 U.S.C. 102(e) as being Anticipated by Tashiro et al. (US 6,494,288). Tashiro et al. show (fig. 3) an actuator unit comprising: a piezoelectric actuator (see for example, col. 5, ll. 41-44, claims 11 and 12); a hollow body (fig. 4b) being elastic and biasing the actuator (col. 3, see ll. 59-67), characterized in that the hollow body is joined tensionally and/or positively to the upper and lower end of the actuator and the hollow body.

Art Unit: 2834

The actuator is gripped in its direction of expansion between an upper and lower cover plate (not numbered in fig. 4b) which are tensionally and/or positively joined to the hollow body.

The hollow body for biasing a piezoelectric actuator, the hollow body being made elastic (again see col. 3, ll. 59-67).

The holes are arranged in rows one above the other, the holes of the rows being laterally offset from one another.

By sight, the minimum distance between adjacent holes of two rows is one or three times the thickness of the hollow body.

The holes are made of spring steel (col. 3, l. 60). Whether or not the holes are punched out or not is not germane to the structure. As is, the claimed invention is the same whether or not the holes are punched out or cut out by laser machining. The steel sleeve behaves as a spring ergo it is spring steel.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tashiro et al. (US 6,494,288) in view of Montgomery (US 5,166,908). Given the

Art Unit: 2834

invention of Tashiro et al. as noted above, they do not show their holes distributed uniformly over the circumference of the hollow body.

Given the invention of Montgomery as noted in paper 11, Montgomery does not show dumbbell shaped holes.

It would have been obvious to one having ordinary skill in the art to have dumbbell shaped holes in the device of Montgomery such as is shown by Tashiro et al. since this shape provides for flexing of the structure, as noted by Tashiro et al. thereby allowing it to be subject to a greater variety of motion which provides additional structural protection to the device.

Claims 8, 9, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tashiro et al. (US 6,494,288). It is not clear how the Tashiro device is made. How the device was made however is not germane to the patentability of the invention since other means of making the device result in a similar structure. Therefore, this carries no patentable weight.

Direct inquiry concerning this action to Examiner Dougherty at (703) 308-1628.

tmd
tmd

November 18, 2003

Thomas M. Dougherty
THOMAS M. DOUGHERTY
PRIMARY EXAMINER
GROUP 2800